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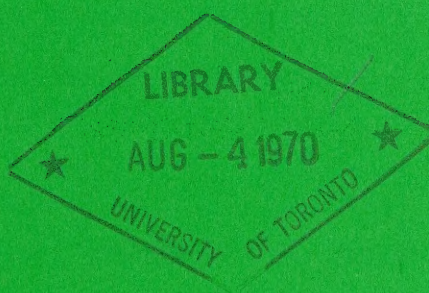
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METAL ROLLING, CASTING AND EXTRUDING, N.E.S.

CENSUS OF MANUFACTURES 1967



ONTARIO STATISTICAL CENTRE
ECONOMIC AND STATISTICAL SERVICES DIVISION
DEPARTMENT OF TREASURY AND ECONOMICS

Hon. Charles S. MacNaughton,
Treasurer of Ontario and Minister of Economics

H. Ian Macdonald,
Deputy Minister



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February
1970

Catalogue
No. 5-2980

METAL ROLLING, CASTING AND EXTRUDING, N.E.S.

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SYMBOLS

- * Confidential
- S Suppressed to protect confidential items
- Nil or Zero
- Amount too small to be expressed
- .. Figures not available
- ... Figures not appropriate or not applicable
- () Figures within brackets are negative

NOTES

1. Figures may not add to the total because of rounding.
2. To ensure confidentiality, confidential items are either combined with other items or suppressed.
3. If an item is combined with other items, this is indicated by brackets or by footnotes.
4. Where a confidential item cannot be meaningfully combined with other items, the confidential item is suppressed by placing an asterisk instead of the actual figure, and the confidential item lumped with "All others".

INTRODUCTION

This report is one of a series designed to provide information on industries and products covered in the 1966 and 1967 Census of Manufactures. The collection of manufacturing data by the Ontario Statistical Centre is carried out under a statistical arrangement negotiated with the Dominion Bureau of Statistics in accordance with the provisions of the Federal and Provincial Statistics Acts.

The use of the same questionnaire as the Dominion Bureau of Statistics provides for comparability of national and provincial manufacturing statistics. In a few cases, there may be slight variances between the statistics published by the Ontario Statistical Centre and the Dominion Bureau of Statistics. These are mainly due to different interpretations in editing and may also be the result of estimating outstanding questionnaires. As new information becomes available, the statistics may be revised.

The classification of establishments included in this report is based upon the definitions embodied in the Dominion Bureau of Statistics Standard Industrial Classification. "Concepts and Definitions" notes prepared by the Dominion Bureau of Statistics for the Census of Manufactures are included in this report.

All correspondence concerning this report should be directed to the Ontario Statistical Centre.

The Metal Rolling, Casting and Extruding Industry, N.E.S. includes establishments primarily engaged in manufacturing non-ferrous metals, such as zinc, tin, lead, nickel and titanium, and their alloys in shapes such as bars, rods, plates, sheets and castings. In addition, this industry includes establishments primarily engaged in pressure die casting of all non-ferrous metals and their alloys and those engaged in the recovery of non-ferrous metals from scrap.

In 1967, the value of shipments of goods of own manufacture in Ontario was \$105 million, same as in 1966. Ontario's shipments represented 77 per cent of the total Canadian shipments. Average production employment in manufacturing operations showed an increase of 7 per cent from 1966. Value added by manufacture amounted to \$33 million, an increase of 5 per cent from 1966. Value added for total activity increased by 9 per cent.

TABLE 1

PRINCIPAL STATISTICS, ONTARIO AND CANADA, 1965 TO 1967

Year	Establishments	Manufacturing Activities						Total Activities			
		Production and related workers		Cost of fuel and electricity	Cost of materials and supplies	Value of shipments of goods of own manufacture	Value ¹ added	Working owners and partners		Employees	
		Number	Man-hours paid					Number	With-drawals	Number	Salaries and wages
			'000		\$'000				\$'000		\$'000
Ontario 1965	44	2,019	4,260	9,175	1,266	66,849	31,221	5	32	2,785	14,337
1966	49	2,269	4,661	10,265	1,454	72,708	31,725	8	47	3,095	16,260
1967	49	2,418	4,978	11,114	1,619	71,465	33,274	*	*	3,306	17,435
Canada ² 1965	73	2,753	5,821	12,261	1,625	87,053	41,340	8	55	3,736	18,800
1966	78	3,050	6,316	13,889	1,826	97,213	42,739	13	76	4,103	21,330
1967	78	3,172	6,591	14,862	2,036	93,195	42,251	8	37	4,287	22,857
Ontario/Canada ratio (%) 1967	63	76	76	75	80	77	79	77	76
											79

¹ "Value Added by Manufacture" is computed from value of shipments plus the net change in inventories of finished goods and goods in process, less cost of materials, fuel and electricity.

² As published by DBS.

Table 2

FUEL AND ELECTRICITY USED IN MANUFACTURING ACTIVITY, ONTARIO, 1966 AND 1967

Description	Unit	1966		1967	
		Quantity	Cost	Quantity	Cost
1. Large establishments reporting commodity detail:			\$'000		\$'000
Bituminous coal					
(a) From Canadian mines	Ton	-	-	-	-
(b) Imported	"	-	-	-	-
Sub-bituminous coal (from Alberta mines only)	"	-	-	-	-
Anthracite coal	"	-	-	-	-
Lignite coal	"	54	1	60	1
Coke	"	251	4	-	-
Gasoline	"	1,677	58	1,579	60
Fuel oil including kerosene or coal oil	Imp. gal.	170,790	68	280,895	81
Wood	"	2,794,103	346	2,406,566	303
Gas:	Cord	4	--	4	--
(a) Liquefied petroleum gases	Imp. gal.	229,137	45	218,602	45
(b) Other manufactured gas	M. Cu.ft.	-	-	-	-
(c) Natural gas	"	793,549	473	879,349	614
Other fuel	"	-	20	-	1
Electricity purchased	Kwh.	48,236,573	396	49,805,214	485
Steam purchased	Pound	-	-	-	-
2. Small establishments not reporting commodity detail:					
Estimate for fuel and electricity		...	42	...	29
3. All establishments:					
TOTAL FUEL AND ELECTRICITY USED		...	1,454	...	1,619

TABLE 3

MATERIALS AND SUPPLIES USED, ONTARIO, 1966 AND 1967

Description	Unit	1966		1967	
		Quantity	Cost \$'000	Quantity	Cost \$'000
A. MANUFACTURING ACTIVITY					
1. Raw materials and purchased components used:					
Metals (other than scrap)					
Aluminum: Ingots	1b.	12,982,990	3,210	13,531,994	3,161
Other forms	"	...	418	1,034,629	450
		619,565	222	658,247	246
Antimony	"	*	*	*	*
Arsenic:	"	*	*	*	*
Oxide, As ₂ O ₃	"	*	*	*	*
Bismuth	"	*	*	*	*
Brass and bronze, all forms	"	*	*	*	*
Cadmium	"	*	*	*	*
Copper ingots and slabs	"	195,745	91	261,527	127
Die casting alloy	"	6,014,536	992	4,872,639	698
Lead, pig: Pure	"	*	*	*	*
Antimonial	"	*	*	*	*
Magnesium		1,389,902	445	1,441,819	468
Manganese metal		*	*	*	*
Nickel		*	*	*	*
Silicon metal	"	2,731,410	516	3,180,027	582
Silver, fine	"	*	*	*	*
Tellurium	"	*	*	*	*
Tin, pig	"	2,909,780	5,078	2,347,133	3,742
Zinc slabs, bars and ingots	"	48,560,151	7,560	66,117,732	10,263
Other metals	"	...	5,944	...	6,798
Scrap metals of all kinds:	"	49,273,428	7,996	57,247,160	9,640
Aluminum	"	*	*	*	*
Babitt	"	12,087,097	6,596	10,306,085	4,748
Copper	"				

¹ Included in "Other metals".² Included in "Other scrap metals".

Table 3 - Materials and Supplies Used, Ontario, 1966 and 1967 - continued

Description	Unit	1966		1967	
		Quantity	Cost \$'000	Quantity	Cost \$'000
Copper, alloyed (brass and bronze)	lb.	31,498,057 *	11,112 * ₂	25,260,002 *	8,949 * ₂
Lead	"	162,637	33	218,858	49
Magnesium	"	2,518,205	808	2,302,803	562
Solder	"	145,961	148 * ₂	77,140 *	53 * ₂
Tin					
Type metal					
Zinc		10,512,313 *	1,196 * ₂	10,530,005 *	1,045 * ₂
Zinc dross		...	8,293	...	7,411
Other scrap metals		...	6,002	...	5,210
All other materials and components					
TOTAL RAW MATERIALS AND PURCHASED COMPONENTS USED		...	66,662	...	64,201
2. Containers and other packaging materials and supplies used:					
Folding and set-up boxes, paper-board		...	77	...	33
Corrugated boxes and cartons		...	369	...	400
Cans, metal		...	46	...	33
Barrels and drums, metal		...	59	...	76
Wooden boxes, crates, barrels, kegs		...	16	...	36
All other		...	129	...	260
3. Operating, maintenance and repair supplies used		...	1,729	...	2,527

Table 3 – Materials and Supplies Used, Ontario, 1966 and 1967 – continued

Description	Unit	1966		1967	
		Quantity	Cost	Quantity	Cost
4. Amount paid out to others for work done on materials owned by establishments		...	3,620	...	3,900
TOTAL		...	<u>72,708</u>	<u>71,465</u>
B. NON-MANUFACTURING ACTIVITY					
1. Purchases of goods for resale in same condition as purchased		...	21,585	...	20,876
2. All other materials and supplies used		...	891	...	641
TOTAL		...	<u>22,476</u>	...	<u>21,517</u>
C. TOTAL INPUT OF MANUFACTURING AND NON-MANUFACTURING ACTIVITIES		...	<u>95,184</u>	...	<u>92,981</u>

TABLE 4

SHIPMENTS OF GOODS, ONTARIO, 1966 AND 1967

Description	Unit	1966		1967	
		Quantity	Value \$'000	Quantity	Value \$'000
A. MANUFACTURING ACTIVITY					
1. Products shipped:					
Secondary non-ferrous metals:					
Aluminum	lb.	41,343,739	10,220	54,327,798	12,243
Lead, unalloyed	"	14,935,476	2,297	12,729,670	1,832
Other non-ferrous metals (tin zinc)	"	4,382,826	1,008	6,950,173	1,379
Alloys, non-ferrous:					
Copper-base alloys (brass, bronze, etc.)	"	30,487,175	16,818	24,052,354	12,723
Lead, antimonial - Primary and Secondary	"	32,628,482	5,344	33,811,041	5,169
Solders	"	15,824,377	8,836	14,150,006	7,585
Type and type metal	"	7,471,947	2,675	4,117,449	1,528
Other alloys, non-ferrous (Babbitt and die casting alloy)	"	18,475,527	5,516	23,844,687	6,449
Other alloys	"	...	683	...	*
Castings:					
Die castings - Aluminum-base alloy	"	11,300,641	6,364	10,818,271	6,230
Zinc-base alloy	"	28,138,316	15,438	39,185,100	20,067
Other castings	"	...	4,042	...	3,345
Rolled, drawn and extruded non-ferrous products (bars, extrusions, pipe, sheet, etc.)	"	...	4,456	...	6,376

* Included in "Other Alloys, Non-Ferrous (Babbitt and Die Casting Alloy)

Table 4 - Shipments of Goods, Ontario, 1966 and 1967 - continued

Description	Unit	1966		1967	
		Quantity	Value \$'000	Quantity	Value \$'000
Anodes for plating - Copper Nickel, zinc and other metals	1b.	294,180	172	483,476	258
Dies, die castings		...	1,826	2,087,689	2,025
All other products shipped		...	1,926	...	1,627
		...	16,334	...	14,987
2. Amount received in payment for work done on materials and products owned by others		...	1,457	...	1,826
3. LESS adjustment for value of sales taxes, excise duties and outward trans- portation charges which could not be deducted from individual commodity items described above		...	(164)	...	(471)
TOTAL ADJUSTED VALUE OF SHIPMENTS AND WORK DONE		...	105,248	...	105,178
B. NON-MANUFACTURING ACTIVITY					
1. Shipments of goods purchased and sold in same condition as purchased		...	23,897	...	24,140
2. Other revenues		...	81	...	113
TOTAL		...	23,978	...	24,253
C. TOTAL OUTPUT OF MANUFACTURING AND NON- MANUFACTURING ACTIVITIES		...	129,226	...	129,431

TABLE 5

EMPLOYMENT AND PAYROLL, ONTARIO, 1966 AND 1967

Employees	1966				1967			
	Male	Female	Total	Salaries and wages	Male	Female	Total	Salaries and wages
	Number			\$'000	Number			\$'000
Production and related workers								
Manufacturing	1,935	334	2,269	10,265	2,071	347	2,418	11,114
Others	-	-	-	-	-	-	-	-
Administrative and office	454	172	626	4,513	504	178	682	4,618
Sales and distribution	175	25	200	1,482	175	31	206	1,703
TOTAL EMPLOYEES	2,564	531	3,095	16,260	2,750	556	3,306	17,435

TABLE 6

MONTHLY PRODUCTION EMPLOYEES IN MANUFACTURING ACTIVITY, ONTARIO, 1966 AND 1967

Month	1966			1967		
	Male	Female	Total	Male	Female	Total
Establishments reporting monthly detail (large establishments only):	Number					
January	1,852	361	2,213	1,968	362	2,330
February	1,849	347	2,196	1,898	296	2,194
March	1,822	321	2,143	1,903	294	2,197
April	1,811	332	2,143	1,944	295	2,239
May	1,836	342	2,178	1,946	320	2,266
June	1,835	315	2,150	2,012	315	2,327
July	1,766	302	2,068	2,057	336	2,393
August	1,881	332	2,213	2,309	423	2,732
September	1,840	323	2,163	1,970	338	2,308
October	1,859	333	2,192	2,014	332	2,346
November	1,906	310	2,216	2,030	341	2,371
December	1,857	311	2,168	2,030	356	2,386
Averages	1,843	327	2,170	2,007	334	2,341
Small establishments reporting annual averages	92	7	99	64	13	77
AVERAGE FOR ALL ESTABLISHMENTS	1,935	334	2,269	2,071	347	2,418

TABLE 7

CALCULATION OF INPUT, OUTPUT AND VALUE ADDED, ONTARIO, 1966 AND 1967

Description	1966			1967		
	Manufacturing activity	Non manufacturing activity	Total	Manufacturing activity	Non manufacturing activity	Total
\$'000						
OUTPUT						
1 Shipments and other revenue	105,248	23,978	129,226	105,178	24,253	129,431
Inventories - Goods of own manufacture:						
Add closing	1,436	...	1,436	1,698	...	1,698
- Goods in process	5,620	...	5,620	6,469	...	6,469
- Finished goods	1,447	...	1,447	1,460	...	1,460
Deduct opening	4,971	...	4,971	5,527	...	5,527
- Goods in process						
- Finished goods						
2 Net inventory change	638	...	638	1,180	...	1,180
3 Gross output (1+2)	105,886	23,978	129,864	106,358	24,253	130,611
INPUT						
4 Purchases of goods not of own manufacture	...	21,585	21,585	...	20,876	20,876
Inventories - Goods not of own manufacture:						
Add opening	...	1,511	1,511	...	1,509	1,509
Deduct closing	...	1,492	1,492	...	1,555	1,555
5 Cost of goods sold (not of own manufacture)	...	21,604	21,604	...	20,831	20,831
6 Materials, supplies, etc.	72,708	891	73,599	71,465	641	72,106
7 Fuel and electricity	1,454	...	1,454	1,619	...	1,619
8 Gross input (5+6+7)	74,162	22,495	96,657	73,083	21,472	94,555
9 VALUE ADDED (3-8)	31,725	1,482	33,207	33,274	2,781	36,056

TABLE 8
INVENTORIES, ONTARIO, 1966 AND 1967

Inventories	1966		1967	
	Opening	Closing	Opening	Closing
1 Manufacturing	book value \$'000			
Materials, supplies, etc.	5,493	6,772	6,648	7,780
Goods in process	1,447	1,436	1,460	1,698
Finished goods of own manufacture	4,971	5,620	5,527	6,469
TOTALS	11,910	13,828	13,635	15,948
2 Non-manufacturing				
Products or materials purchased for resale	1,511	1,492	1,509	1,555
3 TOTAL INVENTORIES	13,421	15,319	15,144	17,502

NOTE: Opening inventories may differ from the closing inventories of the previous year because of changes in classification, the receipt of revised data, the inclusion of new establishments and the removal of establishments which did not operate during the survey year.

TABLE 9
MAN-HOURS, MANUFACTURING ACTIVITY, ONTARIO, 1966 AND 1967

Man-Hours	1966	1967
	Number	
Total man-hours worked in all manufacturing operations	4,428,406	4,538,464
Total man-hours not worked, but nevertheless paid (e.g. paid vacation, sick leave, statutory holidays, etc)	232,419	439,526
TOTAL MAN-HOURS PAID	4,660,825	4,977,990

METAL ROLLING, CASTING
AND EXTRUDING, N.E.S.

LIST OF ESTABLISHMENTS, ONTARIO, 1967

(Does not include establishments classified to other industries, which as a secondary activity, manufacture products typical of this industry)

Establishment	Location
Ace Castings	Scarborough
Armalite Co. Ltd.	907 Oxford St., Toronto
Atlas Titanium Ltd.	Welland
Balog Die Casting	Hespeler
Barber Die Casting Co. Ltd.	Hamilton
Bernard, H., (Canada) Ltd.	West Hill
Burlington Die Castings Ltd.	Burlington
Canada Metal Co. Ltd., The	721 Eastern Ave., Toronto
Canadian Hanson and Van Winkle Co. Ltd.	Etobicoke
Canadian Magnesium Products Ltd.	Preston
Cohen, I., and Co. Ltd.	Kingston
Cottam Die Castings Ltd.	Cottam
Cramco Alloy Sales Ltd.	Scarborough
Custom Rollforming Co. Ltd.	59 Sheffield Rd., Toronto
Deloro Stellite (Division of Deloro Smelting and Refining Co. Ltd.)	Belleville
Die Casters Co. Ltd.	45 Colville Rd., Toronto
Dominion Die Casting Ltd.	Wallaceburg
Dominion Magnesium Ltd.	Haley
Dominion and Monarch Type Ltd.	34 Mercer St., Toronto
Dundas Die Casters Ltd.	Dundas
Eastland Metals Ltd.	Rexdale
Electroline Mfg. Co. Ltd.	Windsor
Federated Metals (Canada) Ltd.	Scarborough
General Smelting Company of Canada Ltd.	Burlington
Grenville Castings Ltd.	Merrickville
Haley Industries Ltd.	Haley
Hewitt Metals Corporation Ltd.	Windsor
Hudson Bay Diecastings Ltd.	Bramalea
Ingot Metal Co. Ltd., The	Weston

LIST OF ESTABLISHMENTS, ONTARIO, 1967

(Does not include establishments classified to other industries, which as a secondary activity, manufacture products typical of this industry)

Establishment	Location
Kester Solder Company of Canada Ltd.	Brantford
Lakeshore Die Castings Ltd.	Oakville
Last Minute Manufacturing Co. Ltd.	Thorold
M. and G. Products	123 Carlaw Ave., Toronto
McKay Smelters Ltd.	Ottawa
Mendler Mfg. Co.	Windsor
Metals and Alloys Ltd.	Leaside
Moore Type Foundry Ltd.	431 King St. W., Toronto
Plasticast Ltd.	Windsor
Pressure Castings of Canada Ltd.	Weston
Prince and Smith Type Foundry Ltd.	113 St. Patrick St., Toronto
Purity Zinc Metals Co. Ltd.	Stoney Creek
Ram Refined Alloys Ltd.	Hamilton
Schultz Die Casting Co. of Canada Ltd.	Lindsay
Tonolli Co. of Canada Ltd.	Cooksville
Toronto Refiners and Smelters Ltd.	28 Bathurst St., Toronto
Uxbridge Foundry	283 King St. W., Toronto
Wagman, Z., and Son Ltd.	190 Edwin Ave., Toronto
Webster Mfg. (Canada) Ltd.	London
White Die Casting Co. Ltd.	Dundas

CONCEPTS AND DEFINITIONS

ESTABLISHMENT

A manufacturing establishment is typically a factory, mill or plant principally engaged in manufacturing activities. The majority of such establishments are firms but many firms have more than one establishment. Such firms are requested to submit a separate Census of Manufactures report for each manufacturing establishment which can meet the reporting requirements embodied in the following definition of the "establishment":

"The smallest unit which is a separate operating entity capable of reporting the following principal statistics:

- Materials and supplies used
- Goods purchased for resale as such
- Fuel and power consumed
- Number of employees and salaries and wages
- Man-hours worked and paid
- Inventories
- Shipments or sales."

Each establishment is required to report on all the activities carried out within its accounting boundaries (except income from investments such as rent, interest and dividends) and data on the different activities (manufacturing, trading in goods not of own manufacture, construction by own labour force, revenue from services, etc.) are requested to be reported separately. It should be noted that the statistics for separate activities are not completely consistent since some respondents cannot distinguish, in their records, materials, shipments and inventories relating solely to their own manufacturing activities. For example, inventory of goods purchased for re-sale may not be distinguishable from inventory of own manufactured goods. Complete consistency, therefore, can be obtained only at the "all operations" (total activity) level and for studies or statistical measures requiring accurate coordinated data, the "total" statistics should be used.

The number of establishments represents the number of operating units that are principally engaged in the activities of the manufacturing industries to which they have been classified. These units do not necessarily represent the total number engaged in the production of a commodity mainly produced in a certain industry. Some commodities are produced as secondary products in other manufacturing and non-manufacturing industries. It should be noted that head offices and auxiliary units which are surveyed separately are not included in the establishment count, (see following notes on head offices and auxiliary units).

HEAD OFFICES AND AUXILIARY UNITS

All head offices and auxiliary units of companies classified to the manufacturing industries such as sales offices, administrative offices, warehouses, laboratories, etc. are now surveyed as part of the Census of Manufactures.

These head offices and auxiliary units are either included in an establishment report or are surveyed by means of the head office questionnaire. The former is the most common case where a single establishment firm has its executive personnel, sales office, etc. located at the site of the manufacturing plant (establishment). The special head office questionnaire is generally used where a firm, regardless of the number of establishments, has separately located offices or auxiliary units. Such offices or units do not constitute establishments within the Census of Manufactures as they do not normally generate operational revenues, but give rise only to costs of operations (mainly salaries and wages) which are automatically included in the value of shipments or sales. Although not considered as establishments, and hence, not included in the "establishment" count for an industry, the operational costs are reflected in either the "Industry" statistics (3 or 4 digit level) or the "Major group" statistics (2 digit level) according to the following rules:

(a) In the case of single establishment firms, statistics for separately located offices and units are classified to the same industry (3 or 4 digit) as the establishment;

(b) In the case of multi-establishment firms, the statistics for such offices and units are coded to the same industry as the establishments of the firm, when all establishments are in the same industry (3 or 4 digit). When establishments of such firms are coded (1) to different industries within a major group (2) to industries in different major groups or (3) to industries in different divisions of the Standard Industrial Classification, then the statistics are included in the major group totals (2 digit level) in which the major part of the company's operations are classified. Although this may result in some distortion of major group statistics in the case of (2) and (3) the statistics at the industry (3 or 4 digit) level in all cases will be left free of these company-wide data.

EMPLOYEES

(a) Production and related workers - Manufacturing activities

In addition to those engaged in production and assembling activities, production and related workers in manufacturing activities include those employed in storing, inspecting, handling, packing, warehousing, etc. They also include employees engaged in maintenance, repair, janitorial and watchman services and line supervisors (working foremen) engaged in similar work to that of the employees they supervise. For those establishments reporting on the "long" form, production and related workers engaged in manufacturing activity are reported as those receiving pay during the last pay period of each month, an average for the year being obtained by summing the monthly figures and dividing by 12. This procedure is followed even though the establishment did not operate in all months in order to arrive at equivalent annual full-time employment. The numbers are somewhat affected by turnover, in that employment is overstated when an employee changes employment during a pay period. In the case of the establishments reporting on the "short" form, respondents are requested to report average annual figures. The man-hours of production and related workers in manufacturing activity represent total man-hours paid (total hours at work during the calendar year plus hours not worked but nevertheless paid for, such as paid vacations, sick leave, statutory holidays, etc.) Data on man-hours are not collected from establishments reporting on the short form. Man-hours for these establishments are estimated. In reporting overtime hours, respondents are requested to report only hours actually at work.

(b) Production and related workers - Non-manufacturing activities

Such employees include those on manufacturing establishments' payrolls engaged in activities such as construction undertaken for the use of these establishments, some outside piece-workers employed in certain industries, logging employees who are reported as part of a sawmilling establishment and any other production workers who are not engaged in manufacturing-type operations.

(c) Administrative and office employees

This category includes all executive and supervisory officials such as presidents, vice-presidents, comptrollers, secretaries, treasurers, etc., together with managers, professional, technical and research employees, superintendents and factory supervisors above the line supervisor or working foreman level, and clerical staffs. Also included are employees in activities such as advertising, credit collections, purchasing, personnel, legal, medical, etc. It should be noted that prior to 1961 this category also included working owners and partners. Also included in this category are employees located at head offices or auxiliary units separately located from the establishment; these are generally included in the figures for the province in which they are located according to the rules outlined under "Head offices and auxiliary units" above.

(d) Sales and distribution workers

This category includes office personnel whose salaries are charged to selling expense, travelling salesmen, driver salesmen, truckdrivers and their helpers, etc. It may also include some sales employees who are reported as part of a manufacturing establishment but are not working at the establishment's location. These are generally broken down by province in cases where more than 15 employees are involved in any one province. The figures exclude persons working on a commission basis who are not considered regular employees of the establishment.

(e) Total employees

This total comprises the foregoing categories including employees located at separately located head offices and auxiliary units. The numbers of employees included under categories (b), (c) and (d) are reported in the form of annual averages and represent as closely as possible full time employment; adjustments are made when reported figures indicate the existence of part time or seasonal employment. In all the above categories, figures on employment refer to the calendar year whether or not other establishment statistics can only be reported on a fiscal year other than the calendar year.

WORKING OWNERS OR PARTNERS

These are not now included in the statistics of employees and salaries and wages. There is some duplication in numbers when a person owns more than one establishment and is reported as a working owner on each Census return. Withdrawals of working owners are defined as amounts withdrawn by owners or partners for normal living expenses excluding withdrawals for payment of income tax.

SALARIES AND WAGES

Salaries and wages refer to gross earnings of employees before deductions for income tax and employees contributions to social services such as sickness,

accident and unemployment insurance, pensions, etc. They include all salaries, wages, bonuses, profits shared with employees, the value of room and board where provided, commissions (paid to regular employees only) as well as any other allowance forming part of the worker's earnings. Payments for overtime are included. Figures on salaries and wages refer to the calendar year.

FUEL AND ELECTRICITY

Figures for fuel refer to amounts actually used (including fuel used in cars, trucks, locomotives, etc.), not to purchases unless the quantities are substantially the same. Any fuel and electricity produced by establishments for internal consumption are not included in the total cost. Values represent laid down cost at the establishment including freight, duty, etc. Although fuel and electricity used is considered part of manufacturing activity it should be noted that it also includes relatively small amounts used in non-manufacturing activities since these cannot be reported separately.

MATERIALS AND SUPPLIES

(a) Manufacturing activities

Figures represent quantities and laid down cost values, at the establishment, of materials, supplies and purchased components owned and used during the year in manufacturing activities and related processes. These statistics represent only commodity items of physical goods (cost of services or overhead charges such as advertising, insurance, depreciation, etc. are not included) whether purchased from others or received as transfers (in the form of materials, components or semi-processed goods) from other establishments of the reporting company. Included are maintenance and repair supplies not chargeable to fixed assets accounts and any amounts charged by other establishments for work done on materials owned by the reporting establishment. Cost of repairs or maintenance done by outside contractors and cost of returnable containers are not included.

(b) Non-manufacturing activities

1. Purchases for re-sale as such

Figures represent cost of materials or products purchased from others by the reporting establishment (or received as transfers from other establishments of the reporting company) for re-sale as such in the same condition as purchased. Included are any finished products received on consignment from other countries.

2. Other materials and supplies used

Figures represent the cost of materials and supplies, if any, used in new construction and in the production of machinery and equipment (for the use of the reporting establishment) by the establishment's own employees. Included are materials used for any capital repairs and alterations carried out by the establishment's employees. Amounts paid to outside contractors for construction and repair work are not included nor is the cost of purchased machinery and equipment. Also included is the cost of office supplies not chargeable to fixed assets accounts and the cost of such other items of materials and supplies used as food, beverages and supplies for establishment-operated cafeterias and lunch counters, first aid and medical supplies, laboratory supplies, etc.

SHIPMENTS

(a) General

The figures represent revenue from all production, sales, services and related activities of reporting establishments with shipments valued in Canadian dollars at the point at which the establishment relinquishes control. The unsold portion at year end of consignment shipments in Canada is treated as inventory and not as shipments but all shipments to foreign countries for which the form B13 "Customs Canada Export Entry" has been completed, are treated as shipments.

In those industries where work on principal products extends over a relatively long period, (Fabricated Structural Metal Industry, Aircraft and Parts Manufacturers, Railroad Rolling Stock Industry and Shipbuilding and Repair Industry) the value of production rather than the value of shipments is recorded. There are certain establishments in other industries which also operate on a basis of progress payments. For these establishments, shipments are also adjusted to work put in place on the basis of net change in progress payments over the year.

(b) Shipments of goods of own manufacture

These figures represent shipments of goods made from own materials either in the reporting establishments or by other manufacturers on the basis of a charge to the reporting establishments for work done. Included are revenue from repair and custom work, amounts received in payment for work done on materials owned by other establishments and the cost (book value) of any goods shipped on a rental basis.

All products and by-products of own manufacture shipped from the establishment are covered, including transfer shipments to sales outlets, distributing warehouses or to other manufacturing plants of the reporting firm, when such units are treated as separate establishments. The value of shipments are net of returned goods, discounts, returns, allowances, sales tax and excise taxes and duties, returnable containers and charges for outward transportation by common or contract carriers. Transportation or delivery expense incurred by the reporting establishment's own carriers are included.

Shipments of goods of own manufacture of establishments which are coded to some other division of the Standard Industrial Classification (on the basis of principal activity) but which are engaged in manufacturing as a subsidiary activity are collected by means of the Commodity questionnaire. Such shipments together with shipments of goods of own manufacture of establishments forming the universe of manufacturing industries are compiled and recorded in the various industry publications.

(c) Shipments of goods not of own manufacture

These figures represent the net selling value at establishment (net of discounts, returns, allowances, sales taxes and excise duties and taxes and transportation charges by common or contract carriers) of all products or materials (including products transferred from other establishments of the reporting firm) sold as such in the same condition as purchased or received as transfers. For those industries which ship such goods on a rental basis, the value of shipments represents the book value of these goods. All sales of consignment goods from other countries are included.

(d) Other revenue

Figures represent the book value of fixed assets, if any, (new construction and machinery and equipment including major repairs, alterations, additions, modifications, installation and assembly work) produced during the year for the use of reporting establishments by the establishment's own employees and for which depreciation accounts are maintained. Included also are any revenues from the sale of electricity and from any operations performed by the establishment's own employees, such as revenue from goods produced or purchased for rental (the book of value of such goods are included as part of shipments of goods of own manufacture or shipments of goods not of own manufacture), servicing revenues, commissions on sales (when not included in value of sales), revenue for company-operated cafeterias and lunch counters and revenue from outside installation or construction work not related to the establishment's own products, sale of used materials (excluding sale of used fixed assets) research and development work, etc. As mentioned previously the figures do not include non-operating revenue such as rent, dividends, interest, etc.

INVENTORIES

(a) Manufacturing activities

Values represent the book values of manufacturing inventory owned in Canada. Inventories held for which progress payments have been received are not included. Where progress payments accounts are maintained, the change in these accounts is treated as a net adjustment to shipments. Figures consist of inventory owned at the plant and at warehouses or selling outlets which are treated as extensions of establishments for the purpose of reporting shipments. Inventory owned in transit in Canada or on consignment in Canada is included. Goods shipped abroad and held in inventory are included in shipments. Opening inventories may differ from the closing inventories of the previous year because of changes in classification, the receipt of revised data, the inclusion of new establishments and the removal of establishments which did not operate during the survey year.

(b) Non-manufacturing activities

Figures represent the book value of inventory of goods purchased for resale as such without further processing, owned by the reporting establishments and held at plants and at any warehouses or selling outlets which are treated as extensions of establishments. Other characteristics are the same as in (a) above.

VALUE ADDED

(a) By manufacturing activities

Figures are compiled by deducting the cost of manufacturing materials, supplies, etc. and fuel and electricity consumed from the (value of shipments of goods of own manufacture adjusted for changes in the value of inventories of finished goods and goods in process).

(b) By non-manufacturing activities

The figures are compiled by deducting the cost of goods purchased for resale (adjusted for changes in the value of inventories of goods purchased for resale) and the cost of non-manufacturing materials and supplies used from the value of shipments of goods not of own manufacture, plus other revenue.

(c) By total activities

The figures consist of value added by manufacturing activities plus value added by non-manufacturing activities. This total value added figure may, in some cases, be less than value added by manufacturing activities as a result of expenditures associated with non-manufacturing exceeding revenues from such activities or because of a decrease in inventory of goods not of own manufacture exceeding the mark-up on the sale of such goods. "Value added" is sometimes referred to as net output or net production.

PUBLICATIONS

This publication is prepared annually by the Ontario Statistical Centre of the Economic and Statistical Services Division, Department of Treasury and Economics. In addition to this report, annual statistics are published on other manufacturing industries. Publications listed below can be obtained from the Ontario Statistical Centre, Queen's Park, Toronto, Canada.

Catalogue Number	Industry Title
5-1280	Biscuit Manufacturers
5-1430	Distilleries
5-1450	Breweries
5-1470	Wineries
5-1510	Leaf Tobacco Processors
5-1530	Tobacco Products Manufacturers
5-2130	Cordage and Twine Industry
5-2480	Foundation Garment Industry
5-2491	Fabric Glove Manufacturers
5-2580	Coffin and Casket Industry
5-2720	Asphalt Roofing Manufacturers
5-2731	Folding Cartons and Set-up Boxes
5-2732	Manufacturers of Corrugated Boxes
5-2910	Iron and Steel Mills
5-2920	Steel Pipe and Tube Mills
5-3230	Motor Vehicle Manufacturers
5-3260	Railroad Rolling Stock
5-3651	Petroleum Refining Industry
5-3652	Manufacturers of Lubricating Oils and Greases

